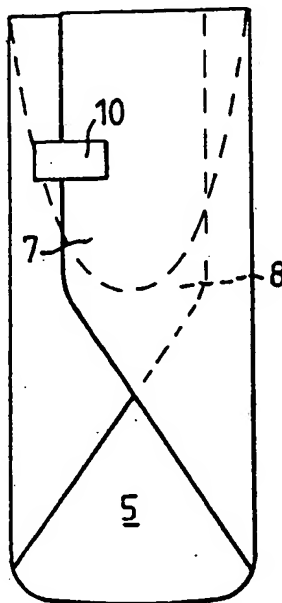




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <b>(51) International Patent Classification<sup>4</sup> :</b><br><b>A61F 5/453, A41B 13/02</b><br><b>// B65B 25/00</b>  | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 89/ 00037</b><br><b>(43) International Publication Date:</b> 12 January 1989 (12.01.89)   |
| <b>(21) International Application Number:</b> PCT/SE88/00357<br><b>(22) International Filing Date:</b> 28 June 1988 (28.06.88)<br><b>(31) Priority Application Number:</b> 8702720-7<br><b>(32) Priority Date:</b> 1 July 1987 (01.07.87)<br><b>(33) Priority Country:</b> SE<br><br><b>(71) Applicant (for all designated States except US):</b> MÖLN-<br>LYCKE AB [SE/SE]; S-405 03 Göteborg (SE).<br><br><b>(72) Inventor; and</b><br><b>(75) Inventor/Applicant (for US only) :</b> FRÖIDH, Arne [SE/<br>SE]; Ejdergatan 7, S-444 55 Stenungsund (SE).<br><br><b>(74) Agents:</b> HJÄRNE, Per-Urban et al.; H. Albihns Patent-<br>byrå AB, Box 3137, S-103 62 Stockholm (SE). |           | <b>(81) Designated States:</b> AT (European patent), AU, BE (Eu-<br>ropean patent), CH (European patent), DE (Euro-<br>pean patent), DK, FI, FR (European patent), GB<br>(European patent), HU, IT (European patent), JP,<br>LU (European patent), NL (European patent), NO,<br>SE (European patent), US.<br><br><b>Published</b><br><i>With international search report.</i> |

**(54) Title:** A SINGLE, PACKAGED MALE INCONTINENCE PROTECTOR

**(57) Abstract**

The present invention relates to a packaged single male incontinence protector of the kind which comprises a back piece (5) which has formed therein a cut-out (6) and which is intended to be brought beneath the scrotum and up to the root of the penis. According to the invention those parts of the protector which in its flat state lie on respective sides of the cut-out and extend substantially outwards thereof, are folded inwardly over the cut-out around fold lines (A-A, B-B) which are parallel with the longitudinal symmetry line of the cut-out, so that these parts overlap one another, and in that the said parts are secured together with an adhesive (10) such as to form a substantially rectangular package whose outer surfaces consist of liquid-permeable material. The invention provides a substantially rectangular hygienic package which has relatively small dimensions and which can be easily carried by the user.

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A SINGLE, PACKAGED MALE INCONTINENCE PROTECTOR.

5 The present invention relates to a single, packaged male incontinence protector of the kind set forth in the preamble of Claim 1.

10 The invention is intended to solve the problem of providing an hygienically packaged single incontinence protector of the kind described in published SE-B-8303663-2 without the use of separate bags and like receptacles.

15 To this end a single, packaged male incontinence protector in accordance with the preamble of Claim 1 has the characteristic features set forth in the characterizing clause of said claim. Single incontinence protector packs of this kind can be carried  
20 discretely by a person suffering from incontinence in a quantity governed by the extent of that person's suffering and also by the length of time for which said person can expect to be absent from the place in which the protectors are kept in larger numbers.

25 An exemplifying embodiment of the inventive incontinence protector pack will now be described with reference to the accompanying drawings, in which

Figure 1 illustrates an incontinence protector of the afore-said kind in its flat configuration of manufacture with the back piece of the protector facing forwards;

30 Figure 2 illustrates the protector of Figure 1 in its in-use configuration; and

Figure 3 illustrates the incontinence protector of Figure 1 in its packet form.

The incontinence protector illustrated in Figure 1 includes a liquid absorbent body 1 which is enclosed between an outer liquid-impermeable sheet of material 2, and an inner liquid-permeable sheet of material 3. The absorption body 1 extends  
5 from the upper edge of the front piece 4 and over substantially the whole of the back piece 5. Those parts of the sheets 2 and 3 which extend beyond the absorbent body, said sheets being mutually joined in these regions, form side pieces 7, 8 which form the sides of the container configured by the incontinence protector in its in-use position as illustrated in  
10 Figure 2. In order to enable the back piece 5 to be inserted beneath the wearer's scrotum down to the root of the penis, so that the protector embraces both penis and scrotum, the back piece has provided therein a cut-out 6 of generally V-shape  
15 configuration while the absorbent body 1 has a cut-out of corresponding shape but of larger size, as shown in the figures. Those parts of the mutually joined sheets 2 and 3 lying over the absorbent body 1 are folded inwards over the absorbent body, to form a peripheral band 9.

20

Figure 3 illustrates a single-piece package in accordance with the invention. This package is the result of folding those parts of the incontinence protector which lie beyond the lines A-A and B-B indicated in Figure 1 over the cut-out 6 from both  
25 sides and fastening said parts together with the aid of adhesive tape 10. In this way there is formed a hygienic, essentially rectangular package, the outer surfaces of which consist solely of liquid-impermeable material and which has relatively small dimensions and can be easily carried.

30

In one variant, not shown, those parts of the front piece of the incontinence protector which lie outwardly of the fold lines A-A, B-B are provided with an adhesive layer. In addition to securing together the overlapping side parts of the  
35 protector 5, this adhesive layer is effective in securing the

protector when in use, to the wearer's underpants, therewith further reducing the risk of maladjustment of the incontinence protector. A further advantage with this variant is that a used protector can be packeted without requiring the use of

5 loose pieces of fastener tape and given a package configuration which is less likely to emit illsmelling odours than the configurations of Figures 1 and 2, and therewith more advantageous.

10 It will be understood that the positions of the fold lines A-A, B-B shown in Figure 1 are only examples of possible positions. The only essential criterion in this regard is that the inwardly folded parts will overlap one another, whereas the extent of such overlap is unimportant. It is

15 preferred, however, that edge of the outer, inwardly folded part will not lie flush with the package defining edge, since it is easier to apply the adhesive tape when these edges lie in mutually the same plane, particularly if the tape is applied mechanically.

CLAIMS

1. A packaged single male incontinence protector which comprises a back piece (5) which is intended to be brought  
5 between the scrotum and crotch of the wearer and which, to this end, has a cut-out (6) formed therein; a front piece (4) and side pieces (7, 8) which join the front and back pieces together such as to provide a container of downwardly tapering configuration, the protector in its entirety being soft and  
10 flexible so as to conform to the contours of the wearer's body and having an outer liquid-impermeable sheet (2), an inner liquid-permeable sheet (3) and an intermediate absorbent material (1), characterized in that those parts of the protector which in its flat state lie on respective sides of the  
15 cut-out and extend substantially outwards thereof, i.e. when the front and back pieces lie against one another, are folded inwardly over the cut-out around fold lines (A-A, B-B) which are parallel with the longitudinal symmetry line of the cut-out, so that said parts overlap one another, and in that said  
20 parts are secured together with an adhesive (10) such as to form a substantially rectangular package whose outer surfaces consist of liquid-impermeable material.
2. A package single protector according to Claim 1, characterized in that the overlapping parts are secured together  
25 with the aid of adhesive tape (10).
3. A packaged single protector according to Claim 1, characterized in that at least one of the mutually overlapping  
30 parts is provided with an adhesive layer.

1/2

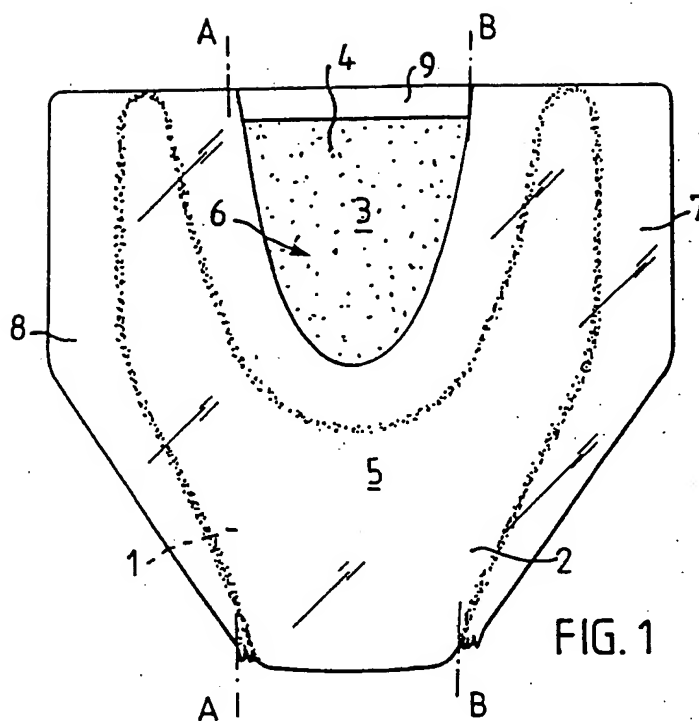


FIG. 1

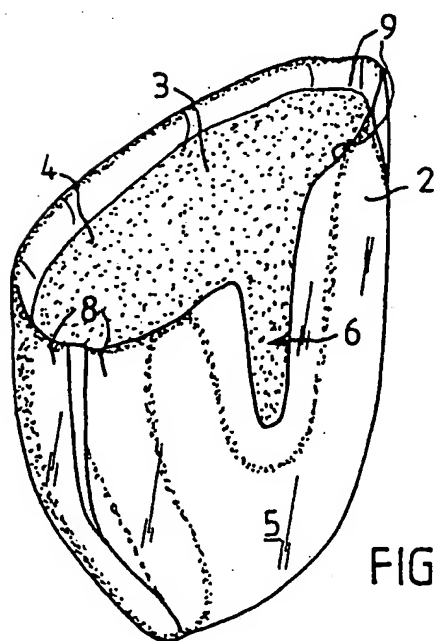


FIG. 2

2/2

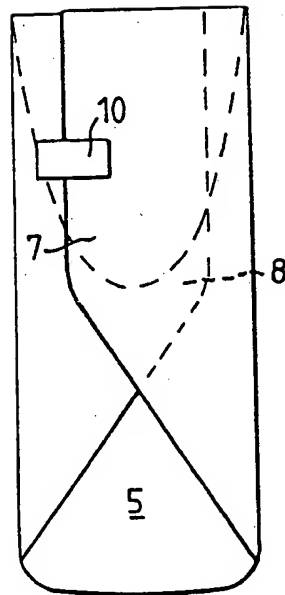


FIG. 3



# INTERNATIONAL SEARCH REPORT

International Application No. PCT/SE88/00357

| <b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) *<br>According to International Patent Classification (IPC) or to both National Classification and IPC 4<br>A 61 F 5/453, A 41 B 13/02 // B 65 B 25/00  |  |   |   |  |  |   |  |                                |   |  |   |   |  |     |
|--|--|---|---|--|--|---|--|--------------------------------|---|--|---|---|--|-----|
| <b>II. FIELDS SEARCHED</b><br><div style="text-align: center; font-size: small;">Minimum Documentation Searched 7</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%; border-bottom: 1px solid black; font-size: small;">Classification System</th> <th style="border-bottom: 1px solid black; font-size: small;">Classification Symbols</th> </tr> <tr> <td style="padding: 5px;">IPC 4</td> <td style="padding: 5px;">A 41 B 13/02; A 61 F 5/44, /453; B 65 B 25/00</td> </tr> <tr> <td style="padding: 5px;">US C1</td> <td style="padding: 5px;">128:284, 294, 295; 604:358-385</td> </tr> </table> <div style="text-align: center; font-size: x-small; margin-top: 5px;">Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched *</div>  |  |   | Classification System   | Classification Symbols   | IPC 4  | A 41 B 13/02; A 61 F 5/44, /453; B 65 B 25/00         | US C1  | 128:284, 294, 295; 604:358-385 |   |  |   |   |  |     |
| Classification System  | Classification Symbols   |   |   |  |  |   |  |                                |   |  |   |   |  |     |
| IPC 4  | A 41 B 13/02; A 61 F 5/44, /453; B 65 B 25/00  |   |   |  |  |   |  |                                |   |  |   |   |  |     |
| US C1  | 128:284, 294, 295; 604:358-385   |   |   |  |  |   |  |                                |   |  |   |   |  |     |
| SE, NO, DK, FI classes as above  |  |   |   |  |  |   |  |                                |   |  |   |   |  |     |
| <b>III. DOCUMENTS CONSIDERED TO BE RELEVANT *</b> <table style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th style="width: 10%; border-bottom: 1px solid black;">Category *</th> <th style="border-bottom: 1px solid black;">Citation of Document; 11 with Indication, where appropriate, of the relevant passages 12</th> <th style="border-bottom: 1px solid black;">Relevant to Claim No. 13</th> </tr> <tr> <td style="vertical-align: top; padding: 5px;">P</td> <td style="padding: 5px;">SE, A, 8603153-1 (MÖLNLYCKE AB)<br/>17 January 1988</td> <td style="vertical-align: top; text-align: center; padding: 5px;">1</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">Y</td> <td style="padding: 5px;">SE, B, 449 172 (MÖLNLYCKE AB)<br/>13 April 1987<br/>&amp; BE, 900006<br/>LU, 85429<br/>GB, 2142243<br/>DE, 3422748<br/>SE, 8303663<br/>NL, 8401992<br/>JP, 60018166<br/>FR, 2548891<br/>US, 4627846<br/>CA, 1225201<br/>AU, 566516<br/>CH, 664688</td> <td style="vertical-align: top; text-align: center; padding: 5px;">1</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">Y</td> <td style="padding: 5px;">GB, A, 2 127 674 (KIMBARLY-CLARK CORPORATION)<br/>18 April 1984<br/>&amp; LU, 85017<br/>FR, 2533808<br/>DE, 3333556<br/><br/>.../...</td> <td style="vertical-align: top; text-align: center; padding: 5px;">1-3</td> </tr> </table> |  |   | Category *  | Citation of Document; 11 with Indication, where appropriate, of the relevant passages 12 | Relevant to Claim No. 13                                   | P   | SE, A, 8603153-1 (MÖLNLYCKE AB)<br>17 January 1988 | 1                              | Y | SE, B, 449 172 (MÖLNLYCKE AB)<br>13 April 1987<br>& BE, 900006<br>LU, 85429<br>GB, 2142243<br>DE, 3422748<br>SE, 8303663<br>NL, 8401992<br>JP, 60018166<br>FR, 2548891<br>US, 4627846<br>CA, 1225201<br>AU, 566516<br>CH, 664688 | 1 | Y | GB, A, 2 127 674 (KIMBARLY-CLARK CORPORATION)<br>18 April 1984<br>& LU, 85017<br>FR, 2533808<br>DE, 3333556<br><br>.../... | 1-3 |
| Category *   | Citation of Document; 11 with Indication, where appropriate, of the relevant passages 12   | Relevant to Claim No. 13  |   |  |  |   |  |                                |   |  |   |   |  |     |
| P  | SE, A, 8603153-1 (MÖLNLYCKE AB)<br>17 January 1988   | 1   |   |  |  |   |  |                                |   |  |   |   |  |     |
| Y  | SE, B, 449 172 (MÖLNLYCKE AB)<br>13 April 1987<br>& BE, 900006<br>LU, 85429<br>GB, 2142243<br>DE, 3422748<br>SE, 8303663<br>NL, 8401992<br>JP, 60018166<br>FR, 2548891<br>US, 4627846<br>CA, 1225201<br>AU, 566516<br>CH, 664688 | 1   |   |  |  |   |  |                                |   |  |   |   |  |     |
| Y  | GB, A, 2 127 674 (KIMBARLY-CLARK CORPORATION)<br>18 April 1984<br>& LU, 85017<br>FR, 2533808<br>DE, 3333556<br><br>.../...   | 1-3   |   |  |  |   |  |                                |   |  |   |   |  |     |
| <div style="font-size: x-small;">           * Special categories of cited documents: 10<br/>           "A" document defining the general state of the art which is not considered to be of particular relevance<br/>           "E" earlier document but published on or after the international filing date<br/>           "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)<br/>           "O" document referring to an oral disclosure, use, exhibition or other means<br/>           "P" document published prior to the international filing date but later than the priority date claimed         </div>  |  | <div style="font-size: x-small;">           "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention<br/>           "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step<br/>           "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.<br/>           "&amp;" document member of the same patent family         </div> |   |  |  |   |  |                                |   |  |   |   |  |     |
| <b>IV. CERTIFICATION</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; padding: 5px;">           Date of the Actual Completion of the International Search<br/>           1988-09-19         </td> <td style="width: 50%; border-bottom: 1px solid black; padding: 5px;">           Date of Mailing of the International Search Report<br/>           1988-09-21         </td> </tr> <tr> <td style="border-bottom: 1px solid black; padding: 5px;">           International Searching Authority<br/>           Swedish Patent Office         </td> <td style="border-bottom: 1px solid black; padding: 5px;">           Signature of Authorized Officer<br/> <br/>           Leif Karnsäter         </td> </tr> </table>  |  |   | Date of the Actual Completion of the International Search<br>1988-09-19 | Date of Mailing of the International Search Report<br>1988-09-21                         | International Searching Authority<br>Swedish Patent Office | Signature of Authorized Officer<br><br>Leif Karnsäter |  |                                |   |  |   |   |  |     |
| Date of the Actual Completion of the International Search<br>1988-09-19  | Date of Mailing of the International Search Report<br>1988-09-21   |   |   |  |  |   |  |                                |   |  |   |   |  |     |
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## III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)

| Category * | Citation of Document, with indication, where appropriate, of the relevant passages | Relevant to Claim No |
|------------|--|----------------------|
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|  |              |  |
|--|--------------|--|
|  | NL, 8303269  |  |
|  | JP, 59082404 |  |
|  | US, 4501587  |  |
|  | CA, 1205953  |  |
|  | AU, 561842   |  |